## Akira ARAI and Hiroshi KATO MAGNET POWDER AND ISOTROPIC BONDE MAGNET Attorney Docket No. 9319A-00018

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Sample No.	> '	(Mg/m³)	āE,	H <sub>c</sub> J (kA/m)	(BH) <sub>max</sub> (kJ/m³)	Br/ρ (x10 <sup>-6</sup> T·m³/g)	Xirr (x10. <sup>7</sup> H/m)	Irreversible Flux Loss
1 (Comp.Ex.)	0.1	6.27	0.83	345	75.6	0.132	7.5	-6.5
2 (This Invention)	0.2	6.26	0.87	415	104.8	0.139	4.8	-4.7
3 (This Invention)	0.5	6.32	06.0	478	113.2	0.142	3.7	-4.0
4 (This Invention)	(2:2)	6.29	0.92		115.9	0.146	3.2	-3.6
5 (This Invention)	2.5	6.30	0.30	530	112.0	0.143	3.0	-3.2
6 (This Invention)	3.3	6.33	0.81	561	102.7	0.128	2.7	-2.7
7 (Comp.Ex.)	3.6	6.31	92.0	553	79.1	0.120	3.3	-3.5

## Akira ARAI and Hiroshi KATO MAGNET POWDER AND ISOTROPIC BONDY Attorney Docket No. 9319A-000183

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Sample No.	Kneading	Molding	Molding	ď	Br	$\overline{\mathbf{H}}$	(BH) <sub>max</sub>	Br/p	χiπ	Irreversible
	Temp.	Method	Temp.	. (Mg/m³)	E	(kA/m)	(kJ/m³)	(kJ/m³) (×10°T·m³/g) (×10°7H/m)	(×10. <sup>7</sup> H/m)	Flux Loss (%)
8 (This Invention)	200	Injection Molding	230	5.30	0.78	563	83.4	0.147	2.1	-2.2
9 (This Invention)	203	Injection Molding	245	5.50	0.80	551	88.3	0.146	2.3	-2.5
0 (This Invention)	211	Injection Molding	260	5.67	0.82	542	92.6	0.145	2.5	-2.9
1 (This Invention)	216	Injection Molding	275	5.80	0.84	535	96.2	0.144	2.7	-3.1
2 (This Invention)	220	Compaction Molding	210	5.95	0.85	531	100.5	0.143	2.9	-3.4
3 (This Invention)	224	Compaction Molding	215	6.21	0.88	517	108.8	0.142	3.2	-3.7
14 (This Invention)	230	Compaction Molding	220	6.48	0.92	510	118.4	0.142	3.8	-4.2

## **TABLE2**

## Fig. 1

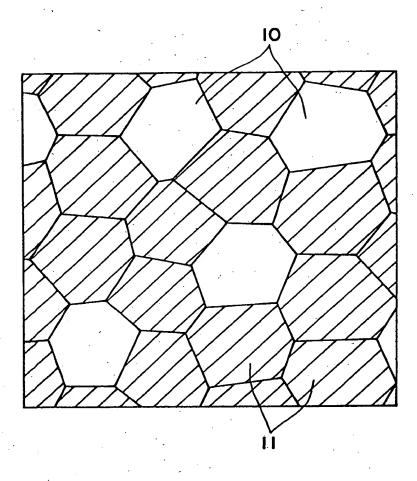


Fig. 2

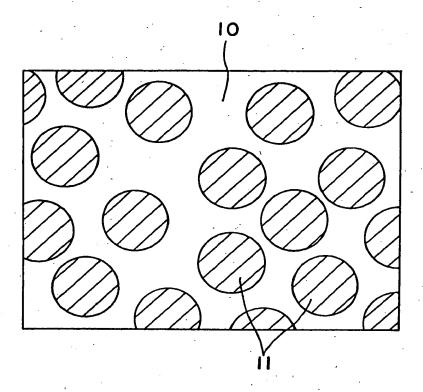
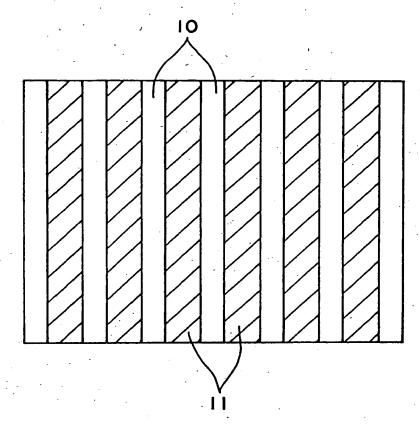


Fig. 3





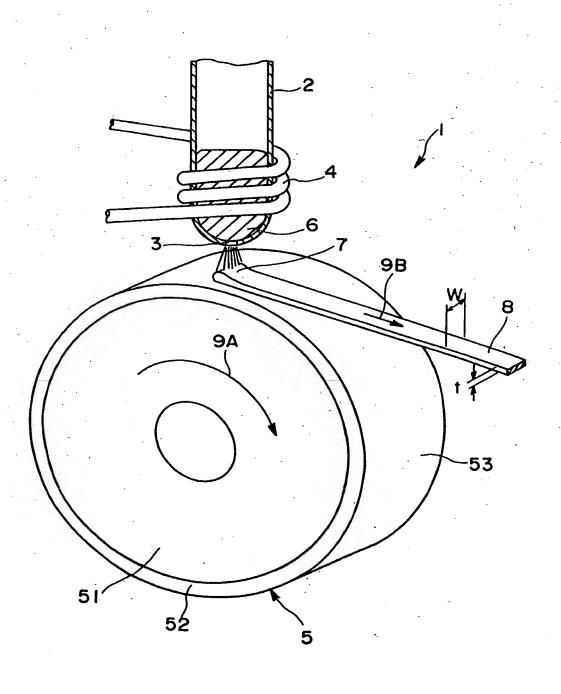
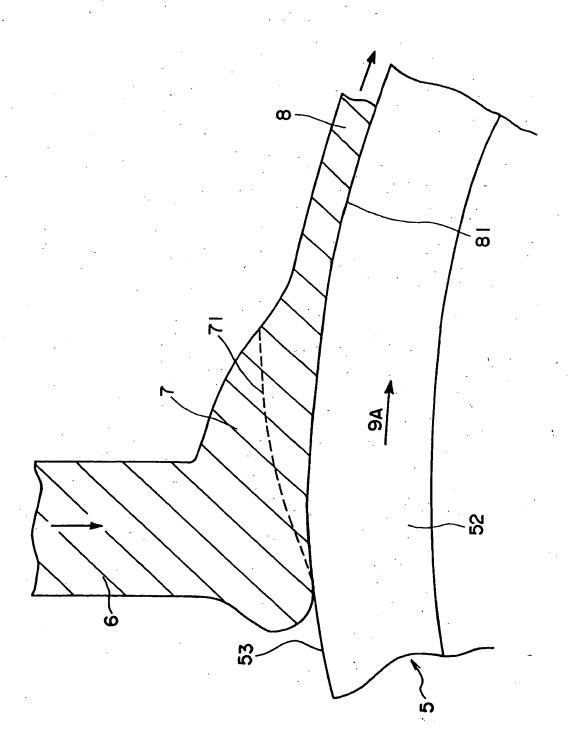
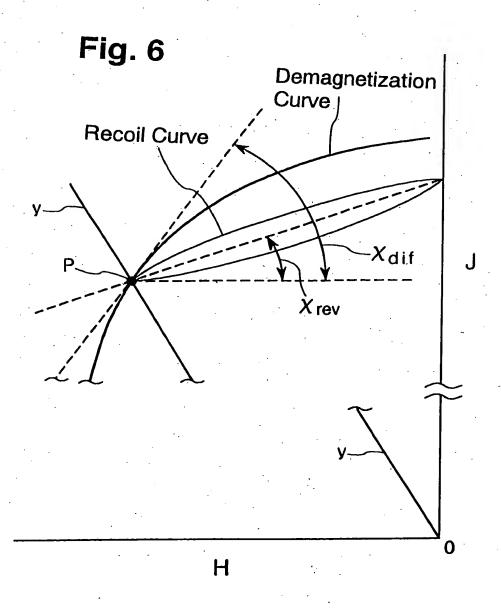


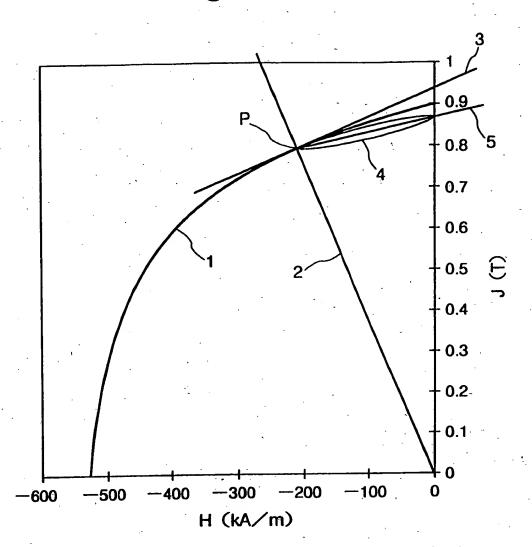
Fig. 5





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Fig. 7



No.1: Demagnetization Curve

No.2: Straight Line

Having a Gradient of -3.8 x 10<sup>-6</sup>H/m in the J-H diagram

No.3: Tangential Line at Intersectioning Point P

No.4: Recoil Curve

No.5: Straight Line

Representing a Gradient of the Recoil Curve